



U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, DC

Mattress NPR Public Meeting
Thursday, March 3, 2005
10:00 a.m.

Welcoming Remarks

Chairman Hal Stratton
Commissioner Thomas H. Moore

Oral Presentations

Panel #1

- Ryan Trainer, The International Sleep Products Association and The Sleep Products Safety Council, representing the U.S. Mattress Industry, *Alexandria, VA*
- Al Klancnik, Group Vice President, Serta International, *Hoffman Estates, IL*

Questions from Commissioners and CPSC staff

Panel #2

- Steve Wolf, Jones Fiber Products, Inc., *Memphis, TN*
- Tony Wolf, President, National Cotton Batting Institute, *Fort Wayne, IN*
- Shawn Baldwin, Technical Services Manager, The Felters Group, *Roebuck, SC*
- William E. (Bud) Younts, President, DI 2 Technologies LLC, *Mooresville, NC*

Questions from Commissioners and CPSC staff

Closing Remarks from Commissioners

Adjourn

Before The U.S. Consumer Product Safety Commission

In re:

**Mattress NPR;
Standard for the Flammability (Open Flame) of Mattresses
and Mattress/Foundation Sets; Proposed Rules, 70 Fed. Reg.
2470 (Jan. 13, 2005)**

**Testimony of Ryan Trainer
on behalf of
The International Sleep Products Association and
The Sleep Products Safety Council,
Representing the U.S. Mattress Industry**

March 3, 2005

**Testimony of Ryan Trainer
Executive Vice President
International Sleep Products Association**

On behalf of the International Sleep Products Association (ISPA) and the Sleep Products Safety Council (SPSC), representing the U.S. mattress industry, I wish to provide the following comments regarding the notice of proposed rulemaking that the U.S. Consumer Product Safety Commission (the Commission) has published at 70 Fed. Reg. 2470 (Jan. 13, 2005) to address open-flame ignitions of mattresses and mattress foundations.

**1. ISPA and SPSC Support the Product Performance Criteria and Test Method
Proposed in the Draft 1633 Standard.**

The U.S. mattress manufacturing industry appreciates very much the resources and hard work that the Commission has invested in this rulemaking proceeding. We believe that these efforts will result in a consistent national standard that will substantially reduce the size and intensity of residential mattress fires.

The U.S. mattress industry supports the product performance criteria and test method that the Commission has proposed. We believe that these criteria are based on scientific research conducted by the Commission, the National Institute of Standards and Technology and others. We also believe that this standard will be effective in improving product safety, will be practical for industry to implement, and will result in mattresses and foundations that consumers will find comfortable and affordable.

Each of these factors is critical to improving residential fire safety. If one of them is missing, the value of the standard will be diminished or lost entirely. For these reasons, the industry also agrees with the conclusions reached in the Commission's cost-benefit analysis. We agree that the proposed pass-fail requirements will result in a net benefit to society.

The industry also agrees that both the test protocol and apparatus that the Commission has proposed are appropriate for these purposes. Both are based on the method and equipment that California specified in its Technical Bulletin 603 (TB 603). As a result of experience the industry has gained over the past year in testing mattresses designed to meet the California standard, we will propose several relatively minor changes to both. These will be described in detail in our formal written comments that we will submit later this month.

Finally, member companies supplying some of the fire-retardant barrier technologies that mattress manufacturers are using today to meet TB 603 – and that are likely to be used in one form or another to meet the proposed federal standard – will separately present research that they and others have conducted regarding their products' impact on human health. They have concluded that mattresses that pass the proposed performance criteria using their barrier materials will not expose consumers to harmful chemicals.

Nevertheless, if the Commission were to make the final performance criteria more stringent or to lengthen the test period, additional research would be needed, given that the industry may need to test different mattress designs and components to meet such additional requirements in a practical and efficient manner.

I will now turn briefly to several other issues concerning the proposed standard that the mattress industry asks the Commission to address:

2. The Proposed Standard Should be Clarified to Make Clear That Imported Mattresses and Foundations Are Subject to the Same Requirements as Domestically Made Products.

For imported mattresses, the proposed standard places the burden of compliance with the standard on the importer. Specifically, the importer of foreign produced goods is to be considered subject to the same legal obligations as a manufacturer. Section 1633.2(i).

While this approach is sound as a starting point, the mattress industry urges the Commission to modify the proposal to identify the importer's precise obligations. We believe that such clarifications will avoid future misunderstandings. Specifically, we suggest that the standard:

- Define the term "importer" to mean in general the first U.S. party that takes legal title to an imported product (also called the "consignee").
- Make clear that the importer is responsible for conducting and maintaining confirmation test records performed for each prototype that the importer imports from each distinct foreign manufacturer. In other words, if one importer imports mattresses of the same prototype from 10 distinct foreign manufacturers, the importer must maintain confirmation test records for that prototype for each of the 10 manufacturers.
- Likewise, make explicit that the testing obligation is defined in terms of prototypes made by the actual foreign manufacturer and not prototypes handled by the foreign exporter, because the foreign manufacturer and the foreign exporter can be different entities and one exporter can handle the same prototype that is made by several different manufacturers.
- The label required by 1633.12(a) should require that both the name of the importer (as defined above) and the actual foreign mattress manufacturer be clearly identified. This information will help facilitate the Commission's enforcement functions by identifying the importer for record keeping requirements and the actual foreign manufacturer for testing obligations.
- The tests to determine whether foreign-made mattresses meet the new standard should be performed by laboratories that are accredited by an objective third party body that they are qualified to perform the required tests in a competent, thorough and consistent manner.
- In addition to requiring that the importer's records include a copy of the manufacturer's written quality assurance program, the Commission should require that each foreign manufacturer acknowledge in writing that it understands the

written quality assurance program maintained by the importer and that it adheres to that program.

- For imported goods, the standard should define the term “production lot” to mean at most those mattresses made by a single foreign mattress manufacturer imported by a single importer that enters the United States on the same customs entry.
- Specify that for imported products, the guaranty required by Section 1633.13(a) must be issued by the foreign manufacturer and identify the production lot to which the guaranty applies.

3. The Commission Should Make Its Policy on Renovated Mattresses a Formal Part of the Standard and Should Clarify the Responsibilities of Renovators.

In Subpart C of the draft standard – called “Interpretations and Policies” – Section 1633.14 sets forth the Commission’s proposed “Policy clarification on renovation of mattresses.” The industry fully agrees with the general views expressed in that policy – i.e., that renovated mattresses are subject to the same open-flame performance requirements as new products. Otherwise, a substantial quantity of mattresses sold primarily to consumers in the lower socio-economic groups – the very segment of society that research shows is most at risk from mattress fires – would escape the requirements of the proposed standard, thereby jeopardizing its overall effectiveness.

However, the industry believes that the scope of this policy needs clarification and broadening. Furthermore, its designation as merely a Commission “interpretation and policy” suggests that it is less legally significant than the other sections of the standard. Therefore, we urge the Commission to make clear that Section 1633.14 has the same force and effect of law as the rest of the standard by fully incorporating it in the standard itself, rather than relegate it to the role of a mere interpretation or policy.

With regard to the scope of this policy, we also urge the Commission to note in the standard that under the Textile Fiber Products Identification Act, the Federal Trade Commission requires that a mattress that contains reused filling materials be labeled as such, and provide that renovators may combine the FTC and Part 1633 statements on the same label.

In addition, we request that the Commission consider coordinating its enforcement efforts with regard to renovated mattresses with state governments that also regulate these products. The industry believes that such coordination could provide a number of important benefits to both the Commission and state governments by allowing each to leverage their limited resources to enforce the overlapping rules in a more consistent and effective manner.

4. The Commission Should Consider Rescinding the Existing Cigarette-Ignition Standard Once the Open-Flame Standard Becomes Effective.

At present, mattresses must pass the existing cigarette ignition standard codified at 16 C.F.R. Part 1632. Based on experience to date with designing and testing mattresses to meet TB 603, however, the mattress manufacturing industry believes that the more stringent requirements of TB 603 call for the use of materials that will result in the finished mattress that necessarily pass the existing 1632 requirements. As a result, the new open-flame requirements would in effect make the existing cigarette-ignition standard redundant, and therefore not necessary. Overlapping regulations, coupled with different test methods, will confuse manufacturers, add unnecessarily burdensome costs and may cause another healthy U.S. industry to lose its competitive edge over foreign manufacturers due to over-regulation.

The industry has raised this issue with Commission staff and plans to develop statistical data regarding the overlap between the existing and proposed standards. Based on the results of that research, we expect to make a formal request in the near future that the 1632 requirements be rescinded. Therefore, while it is premature to make such a formal request at this moment, we wish to raise this issue on the record now so that the Commission can consider the possible impact of such a future request as it finalizes the proposed open-flame standard.

5. The Commission Should Make Clear that the Proposed Standard Preempts State Requirements that Address Mattress Flammability Risks.

The Flammable Fabrics Act, the Commission's own regulations and its consistent interpretation of those authorities make clear that once the Commission has regulated the flammability of a given product, a state is preempted from imposing its own flammability rules with regard to the same product absent the Commission exempting that state requirement from federal preemption. Nevertheless, bills pending in several state legislatures would set separate – and potentially conflicting – flammability requirements for mattresses and foundations. Likewise, efforts are underway to attempt to set mattress standards that are different from the proposed Part 1633 through local building codes.

A clear statement by the Commission within the text of Part 1633 will help remove doubt that future state or local efforts to regulate mattresses are preempted. Both industry and state or local governments would unnecessarily expend significant resources in researching, promulgating, and commenting on bills and regulations that are federally preempted. This tremendous waste of resources can be minimized by including a few clear words on the subject in the standard itself.

Therefore, to avoid confusion and duplication of effort, and to fulfill Congress' intent that the Commission set consistent and uniform national product safety rules, we request that your agency reiterate in the text of the standard itself or its preamble the Commission's position regarding preemption, to make clear that no state (including municipalities and

other local governments) may enforce different flammability rules with regard to mattresses and foundations without the Commission's prior consent.

6. The Commission Should Not Require Manufacturers to Maintain Material Samples.

Proposed Sections 1633.11(b)(2) and .11(e) require that a manufacturer maintain samples of all materials used in a qualified prototype for the period ending three years after those prototypes are no longer in actual production. For many manufacturers, this will be a multi-year requirement. Maintaining these samples would be highly burdensome because it would consume substantial material storage resources. In fact, depending on the number of prototypes that a manufacturer requires for its product mix, the materials that would need to be archived under the proposed sample storage requirement could quickly fill a small warehouse.

Technology today allows for easy storage of digital photos and videos of flammability tests and technical analyses of mattress components. The apparent purpose of this proposed requirement – to document the quality and performance characteristics of the materials used to make the prototype – can be accomplished through more effective and less burdensome means. The types of component quality and manufacturing records that a manufacturer will generate and maintain by following a proper quality assurance program will document the construction and composition of a qualified prototype in a far more efficient and complete manner than keeping samples of the prototype.

For these reasons, we urge the Commission to allow a manufacturer to document the characteristics of the materials used in a qualified prototype through appropriate quality assurance documents, and not require a manufacturer to maintain samples of the prototype.

7. Miscellaneous and Other Definitional Issues.

In reviewing the proposed standard, the industry believes that a number of definitions should be modified or added to clarify some of the terms that at present might be ambiguous or incomplete. For example, the distinctions between prototypes that require testing, those that do not and product models require clarification. In addition, the draft regulations would benefit from a single clear definition for a number of concepts that are used somewhat ambiguously in the document. It is also critical that the record maintenance provisions be clarified in a number of important aspects.

We will provide specific suggestions for these and other similar points (and possibly supplemental comments on the above points) in more detailed public comments that we will submit to the Commission later in the public comment period.

Testimony to the Consumer Product Safety Commission

Mattress NPR Hearing

**Al Klancnik, Group Vice President
Serta International**

March 3, 2005

Mr. Chairman, and honorable members of the Commission. My name is Al Klancnik of Serta International. I am here today to give you Serta's summary evaluation of the Consumer Product Safety Commission's proposed safety standard for open-flame resistant mattresses and the advance notice on proposed rulemaking (ANPR) on top-of-bed accessories, such as blankets, comforters and pillows.

For reference, Serta is the second largest U.S. mattress manufacturer, with annual sales in 2004 of \$755 million. We are based in Hoffman Estates, Illinois, and have 26 plants across the country. The company was founded in 1931, nearly 75 years ago, and we have been making mattresses for consumers ever since.

Today, Serta is the first and only national mattress manufacturer with open-flame resistance protection in all its lines across the country. All Serta beds manufactured throughout the United States after January 2005 comply with the proposed 16 CFR 1633 safety standard, even though this is not required by current law.

As a corporate citizen, Serta believes that this is the responsible action to take on behalf of consumers for two simple reasons: the need is pressing and the technology is available to achieve it. Since open-flame resistant mattresses can help save lives in a bedroom fire, we contend that consumers deserve these safer mattresses *now* from *all* mattress manufacturers, not only Serta – and not just in California where it is mandated, but within all 50 states.

Based on our experience over the last 16 months, CPSC's proposed federal standard is both realistic and attainable for the mattress industry. Serta finds it practical and economically feasible to produce and sell these safer consumer beds throughout the U.S.

Our production of Serta FireBlocker™ mattresses began in October 2003, more than one year before TB 603, California's open-flame regulation for mattresses and box springs, became law. By moving forward, Serta has shown that the technology exists to cost-effectively make and market comfortable mattresses that can help to save lives today.

Upon careful review of the briefing documents on the NPR for 16 CFR 1633, we find the protocol and criteria for passing 1633 to be acceptable. In our opinion, this regulation will significantly reduce the risk of a large fire in bedrooms furnished with compliant beds.

In a related manner, we also have reviewed the ANPR for 16 CFR 1634, and find it acceptable as well. As documented in your briefing package, the risk of a large fire is still very possible unless top-of-bed accessories are also regulated to resist ignition or burning from an open flame. To that end, Serta supports the regulation for open-flame resistance of top-of-bed accessories as proposed by the ANPR 16 CFR 1634.

We join CPSC in believing that the best way to protect consumers from the dangers of bedroom fires is to create separate open-flame standards for both mattresses and bedclothes.

Serta applauds the actions of the commission and its far-sighted decision to create new federal standards that will eventually result in a safer bedroom environment for all Americans. Serta will submit additional written comments and questions, or requests for clarification at a later date.

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Mattress NPR Hearing

Comments for the consideration of The Consumer Products Safety Commission

**Presented by
Steve Wolf, Vice President
Jones Fiber Products, Inc.**

March 3, 2005

Honorable Commissioners and ladies and gentlemen of the CPSC, I am Steve Wolf, Vice President and General Manager of Jones Fiber Products. We are a garnerter of cotton-based batting and fire barrier products. Our company is national in scope and has been in the garnering industry under the current ownership since 1981. We supply products to the manufacturers of mattresses, futons and furniture.

Our company has been a champion for fire safe products in the home furnishings industry for many years. In the 1980's we worked with other industry members to develop the cigarette smoldering test for production lines, which is now known as ASTM D 5238-98. This test is the anchor of quick production testing for cotton-based products on many production floors today. In the early 1990's we chaired the committee in the National Cotton Batting Institute that developed the UL certification program, which made UL certification of a garnerter's fire resistant products compulsory for membership in the National Cotton Batting Institute. For many years prior to the UL certification program we voluntarily supplied our customers with objective evidence that our product conformed to the existing cigarette ignition and open flame laws. Suffice it to say fire safety has been high on our priority list for a number of years.

We have reviewed your proposed rulemaking for mattresses and foundations for open flame testing. We would like to go on record as being an endorser of the proposal. The spirit of the regulation truly embodies the cooperative manner in which industry and government can work together to accomplish a safer home and environment without throwing out concern for cost.

As a direct result of a similar regulation, California TB 603, the mattress industry has already seen the questions of exorbitant cost and lack of available fire barrier products prove to be unfounded. The supplies to help mattress manufacturers meet this proposed regulation do exist at pricing that is dollars per linear yard less than was first thought it would be.

Our industry's primary product, cotton based batting treated with Boric Acid, has been a leader in delivering good performance in fire barriers at very competitive prices. To that end we know that our product is a very "green" product and certainly a renewable resource. We have constantly used the combination of cotton and Boric Acid since the early 1970's beginning under the previous ownership. We have employees who have worked with the product daily in excess of thirty years and they have never experienced any Boric Acid related health problems. Coincidentally, they are leading very healthy, productive lives and are blessed with healthy children.

Cotton batting treated with Boric Acid has been the product of choice for several decades in many state and Federal specifications for institutional bedding. The product has been proven effective in the field many times in institutional bedding. There are numbers of incidents on record of inmates actually trying to ignite fires using mattresses with Boric Acid treated cotton. To my knowledge there is no case on record where they were successful. Actually quite to the contrary, in many cases officials have been quoted as praising the mattresses for their inability to ignite and foiling the plot. We consider this to be quite a testimony of the performance and durability of the product.

Based on the Commission's draft there seems to exist some "data gaps" to give conclusive proof of the safety of Boric Acid in our product. We are currently in the process of answering the questions as put forth in your draft concerning the safety and durability of our product. Currently we are accumulating sound data based on good science that will fill in those "data gaps" and prove conclusively when enjoined with existing data that cotton batting incorporating Boric Acid presents absolutely no health or safety risk to the consumer and is durable in the home setting. We expect to have this work concluded and ready to present to the Commission in our written comments on or before March 29, 2005.

We urge the Commission to move forward expeditiously with the implementation of the regulation. We would like to thank the Commission for holding this oral comment hearing today. We would also like to extend a personal word of thanks for the many tireless hours that the Commissioners and Staff have spent pulling this body of work together.

I will be glad to answer any questions you might have.

Thank you very much.

Steve Wolf

NCBI Testimony before the Consumer Product Safety Commission Mattress NPR Hearing

**Tony Wolf, NCBI President, Fort Wayne, IN
March 3, 2005
Washington, DC**

Good morning.

I am Tony Wolf, a cotton batting, mattress, and futon manufacturer from Fort Wayne, IN. My family's company, The Wolf Corporation, was founded in 1873 and has been a cotton, bedding and upholstery manufacturer for more than 130 years.

I am here today representing the National Cotton Batting Institute and serve as its President.

The National Cotton Batting Institute represents U.S. companies that manufacture and sell batting for use in mattresses, futons, home furnishings, and upholstered products. The Institute has a long record of research and development leading to safe and cost-effective products that meet or exceed current open-flame and smolder-ignition standards.

Any Institute member that supplies flame resistant cotton batting for mattresses, futons and upholstered furniture must comply with the Institute's certification program that is based on federal and state standards and ASTM testing procedures. Underwriters Laboratory, as an independent third party, monitors compliance with the program, inspecting the products of each manufacturer on a quarterly basis for compliance with flammability standards.

Mr. Chairman, our industry thanks you for holding this hearing on 16CFR 1633, the proposed standard for the open flame flammability of mattress and mattress foundation/sets. Our industry has advocated the need for such a standard that goes beyond the current federal standard requiring mattresses and mattress pads to be resistant to cigarette ignition. We commend the Commission for developing this broader rule that addresses open flame ignition and are pleased to offer comments in support of the standard.

The Institute has supported adoption of the full-scale test method incorporated in California Technical Bulletin 603 (TB603) as the basis for a national standard. CPSC staff has been diligent in its research into the issue and its approach to testing. The attempt to gather comments from all segments of the sleep products industry has provided ample opportunity for input from manufacturers and component suppliers having a stake in the issue.

Based on a review of capacity within the industry, the Institute agrees with the Commission staff's assessment that the alternatives in flame retardant chemicals and flame resistant materials are sufficient to provide wide flexibility in meeting a mattress flammability standard, and that the environment and human health will not be adversely affected by the use of these materials.

We urge the Commission to establish a fast track to implementation of this standard. California's record of success in establishing a new law bodes well for a successful implementation of a national standard.

We also recommend that the Commission incorporate appropriate steps to enforce the standard, particularly against manufacturers that are found deliberately attempting to circumvent the law. These penalties should be progressive, with little flexibility for first offenders.

In addition to providing these comments and suggestions in support of a national mattress flammability standard, I want to address briefly questions that have been raised about the effect of materials used to render cotton batting flame resistant on the environment and human health.

A process developed by the USDA's Agriculture Research Service more than 30 years ago is the standard applied today to produce a safe flame-resistant and smolder-resistant cotton filling.

The system of applying boric acid, a boron-based product derived from borates, to the cotton fibers was developed in a cooperative research project by the National Cotton Batting Institute and ARS scientists at the Southern Regional Research Center in New Orleans to meet the standards of the day.

Mattresses constructed with boric acid-treated cotton batting fared extremely well in flammability testing leading up to the adoption of the California standard.

Cotton properly treated for flame resistance is self-extinguishing. Use of treated cotton batting in mattresses, futons, and upholstered furniture significantly reduces the risk of injury because of its negligible burn factor and reduced emission of toxic fumes.

As for health and safety, the record speaks for itself: There are millions of mattresses in use today that contain boric acid-treated cotton, and there is no record of human health risk related to sleeping on mattresses containing this combination of materials.

Some question the toxicity of boron and in particular boric acid. Toxicological research that addresses human health and environmental effects of boric acid and borates has shown them to be safe in consumer products. They have low intrinsic toxicity and there is essentially no exposure to borates from these products, since the boric acid-treated batting is inside the product and does not dust out of the cotton batting. Toxic doses to humans are unattainable from use of boric acid in mattresses, futons, and upholstered furniture.

Last August, the National Center for Environmental Assessment raised the allowable daily dose of human consumption of boron. The NCEA is the division of the Environmental Protection Agency charged with assessing health risks associated with substances found in the environment.

The increase from 6.3 milligrams to 14 milligrams was the result of a multi-year assessment of more than 200 studies on boron's health effects.

The great benefit of boron-treated cotton batting is boric acid's ability to be absorbed into the cotton fiber. However, as with any water-soluble compound, it is possible that some of the boric acid could be removed from the inner core of the bedding if water penetrated

that deep. For that to happen, however, would require water damage sufficient to result in the total loss of the bedding or upholstered furniture.

Like cotton, boric acid is a safe product that also is used in products consumers use every day – in pharmaceuticals, topical medicines for skin and even contact lens solution. It also is a necessary micronutrient to produce the fruits and vegetables we eat every day.

Our greatest exposure to borates is the one to three milligrams we eat every day, but we also encounter borates in countless household items - from wallboard and insulation to cookware and eye drops.

The National Cotton Batting Institute continues to monitor and refine the process of developing flame retardant cotton. Currently, we are gathering additional evidence that our product, cotton and borates, is very innocuous and presents no human health risk when properly used as a fire barrier in mattresses. We will present this evidence in written comments to the Commission later this month.

Mr. Chairman, I hope that this brief review sheds some light on how borates are used in creating a safe, cost-effective flame retardant for use in producing flame resistant mattresses, futons, and upholstered furniture.

In summary, the National Cotton Batting Institute supports the adoption of the proposed national flammability standard for mattress and mattress foundation/sets. Enforcement of this standard will greatly improve the safety of today's sleep products.

Thank you for the opportunity to provide these comments.



The Felters Group • 5965 Hwy. 221 • PO Drawer 228 • Roebuck, SC 29376

February 22, 2005

United States CPSC
Office of the Secretary

Subject: Oral Presentation Text Mattress NPR Hearing

Following is a transcript of a presentation I would like to present on behalf of my company, The Felters Group, during the Public Hearing for the proposed Open Flame Ignition of Mattresses:

Good morning, my name is Shawn Baldwin. I represent The Felters Group, located in South Carolina. We have developed various flame-retardant barrier materials, offering treated textile and foam substrates to meet proposed and existing mattress and furniture flammability standards worldwide.

First, let me express my appreciation to the CPSC staff for not only allowing me to speak here today, but also for the open dialog during the past months as this new standard has been developed. The Consumer Product Safety Commission has proactively sought the feedback of industry during the development of this standard, and we applaud their efforts in the arenas of mattress, bedding, and furniture flammability. These are important product safety issues, which affect the lives of our friends and families.

In review of the existing Technical Bulletin 603, enacted in the State of California in January of this year, as well as the proposed CPSC legislation we are discussing here today, we feel there are two omissions common to both standards. Because the two standards are quite similar, I will not refer to them individually for my subsequent comments. We believe that both of the following points are critical to the success of the national mattress open flame standard in creating a safer environment in our homes.

First, the standard does not appear to address product durability. While the performance characteristics required to meet the standard are well-defined, and in our opinion very effective, there is unfortunately nothing included to assure that these flammability characteristics will be present through the life cycle of a mattress. During the development of our own fire retardant products, we have identified various failure modes in typical mattress construction. Most of these issues have been addressed directly by the bedding manufacturers, working together with the various suppliers. Regrettably, the lack of a durability requirement, coupled with concerns of the additional costs associated with integration of the flame retardant properties, may cause some manufacturers to be inclined to meet "the letter of the law" but not the "intent of the law".

One of potential failure mode that we have identified is the introduction of moisture to the mattress. Whether introduced by a spill of a beverage, by human or animal urine, or by other means, some water-soluble fire retardants may suffer sufficient weakening after such moisture exposure to render them ineffective. With some water-soluble fire retardants located just under the sleeping surface, over time even perspiration may eventually degrade the barrier material to the point of ineffectiveness.

Another potential failure of certain fire retardant technologies is migration of the chemical treatment. With some common fire retardant materials proposed to meet this standard, there is a tendency for the chemicals used to detach from the fibers over time and migrate away from the area to be protected. This can occur gradually as the mattress is used. For these reasons, we propose that the standard be amended to include a durability requirement.

The second area of concern for us is with toxicity and environmental hazard. By way of example, we know that some barrier materials utilize fiberglass. The U.S. Department of Health & Human Services defines glass fiber as "reasonably anticipated to be a human carcinogen", and is released as airborne respirable particles during production and use". OSHA requires labeling of fiberglass as "a potential carcinogen" on warning labels, and the EPA classifies fiberglass as an animal carcinogen. Similarly, some chemical substances used to achieve compliance with the fire standards may have toxicity issues with the type of long-term repeated exposure associated with mattresses. For these reasons, we request that the standard be amended to include a consumer warning label regarding the existence of any known hazardous materials contained in the mattress structure. While this action may not define the specific level of hazard to the consumer, it will allow the consumer to make a decision regarding whether the potential hazard is a factor to be considered when purchasing these products.

Our goal is to help provide bedding and furniture of enhanced safety. We realize that cost is an important consideration, and firmly believe that there are cost-effective fire resistant materials available which are durable and do not create toxic and environmental hazards. Thank you.

February 24, 2005

Mr. Hal Stratton
Chairman
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Comment on Proposed Regulation for Mattresses

Dear sir:

Thank you for the opportunity to share real world knowledge gained from being intimately involved in the development and implementation of business solutions for compliance with California AB603 which provides an excellent model for implementation of the proposed national standard.

As background and credibility, I have devoted my full time professional career to flame resistant furnishings since AB603 was implemented including business leadership in a large multinational firm and the founding of my own company focused on ingredient fibers for these markets. Being deeply immersed in the process of regulatory development and implementation of TB603 has provided a unique opportunity to observe and learn and hopefully there will be benefit in sharing key learnings with the CPSC as the national standard is instilled.

I admit up front that my company's self-interests could be served by the CPSC integrating the following points into its policies and regulations. However, that fact alone makes them no less credible, no less valid and no less beneficial for the US consumer.

Summary of Key Points:

1. We support the regulation as proposed. We believe it achieves the desired results with a favorable cost / benefit for US consumers.
2. No more than 6 months for implementation of the final standard is recommended. A shorter implementation period means fewer people will die in bedroom fires. The California experience shows that many manufacturers will not use the implementation period wisely, waiting in some cases until the last month to *begin* their preparations. There are regional mattress companies with no sales into California who are building and testing prototypes today.
3. We support the requirement of prototype testing before offering for sale. This clearly puts the responsibility for compliance on the manufacturer versus the enforcement process. The temptation to use "deliberate ignorance" as justification for offering non-compliant products for sale has proven too great for some.

4. The opportunity to pool prototypes is an effective means of reducing the burden of compliance if the manufacturer chooses a robust solution. As of this date, there are fire barriers in the market today, with a cost of under \$20.00 per queen set of bedding, that have yet to fail in testing against TB603 including difficult solid visco-elastic foam cores and the like. Use of high performance, reasonable cost barriers enable a wide range of designs to be pooled. The mattress manufacturer has the option of using lower cost, lower performance barriers in low fuel designs and can make the business decision to incur the additional prototyping testing costs.
5. Fire retardant materials exist today in sufficient quantities and at reasonable costs to implement this standard while presenting no undue health risks to the consumer. Unfortunately there are those constituencies who are miss-representing the facts about many valid products to serve their own self interest.

Science based assessments which include the real world potential for exposure must be included. For example, antimony trioxide and vinylidene chloride were mentioned in the briefing and they do present hazards in their pure form at high exposures. However, once polymerized into fiber or incorporated into the inherently FR fiber, the potential for exposure to these materials is nil. Two hour boiling water extractions resulted in less than 20 ppm antimony in the leachate demonstrating a dominimus potential for exposure. Analysis of antimony content in these fibers is difficult and requires digestion of the fiber with hot nitric acid which is a reflection of their stability and resistance to degradation.

Thank you in advance for your consideration. We are always available should additional detail be needed.

Sincerely,

William E. Younts, III
President